

Claims

1. A method for forming a film-like optical coating creating an interference phenomenon on the surface of an object, **characterised in that**

- on a given first spot on the object surface, there is formed a film-like optical coating, which creates a given first interference effect at a given wavelength of visible light,

- on a given second spot of said surface, there is created a given second interference effect at said wavelength of visible light, said second interference effect being different from said first interference effect.

2. A method according to claim 1, **characterised in that** on a second spot of said object, there is formed an uncoated area, the interference effect whereof is the reflecting of visible light from said uncoated surface.

3. A method according to claim 1, **characterised in that** on a second spot of said object, there is formed a film-like optical coating with a given second interference effect at a given wavelength of visible light.

4. A method according to claim 1, **characterised in that** in order to make the coatings, on the surface of the object to be coated there is essentially employed a CVD (Chemical Vapour Deposition) process.

5. A method according to claim 1, **characterised in that** in order to produce the coatings, on the surface of the object to be coated, there is essentially employed a PVD (Physical Vapour Deposition) process.

6. A method according to claim 1, **characterised in that** in order to produce the coatings, on the surface of the object to be coated, there is employed sputtering.

7. A method according to claim 1, **characterised in that** the coating is tinted by means of a colouring agent in order to achieve a given nuance on the surface of the object to be coated.

8. A method according to claim 1, **characterised in that** in order to focus the coating on the surface of the object to be coated there are created areas with different electrical charges.

9 A method according to claim 1, characterised in that in order to focus the coating on the surface of the object to be coated there are created areas with different magnetic properties.

5 10. A method according to claim 1, characterised in that in order to produce a given coating pattern on the surface of the object to be coated, some of the coating is removed by using an ion beam.

10 11. A method according to claim 1, characterised in that it includes a step for marking the object with an identifier.

12. A method according to claim 11, characterised in that said identifier is a trade mark identifier.

15 13. A method according to claim 11, characterised in that said identifier includes a symbol of a lawful manufacturer of the object.

14. A method according to claim 11, characterised in that it includes steps for marking the identifier as both visible and invisible for the naked eye.

20 15. A method according to claim 14, characterised in that in the step for marking the identifier as invisible for the naked eye, said identifier is realised as a sufficiently small identifier.

25 16. A method according to claim 14, characterised in that in the step for marking the identifier as invisible for the naked eye, said identifier is realised so that it can be detected on the basis of a given photon radiation.

30 17. An object coated with a film-like optical coating, characterised in that it comprises

- on a given first spot on the object surface a film-like optical coating, which is arranged to create a given first interference effect at a given wavelength of visible light,

35 - on a given second spot on the object surface, which is arranged to create a given second interference effect at said wavelength of visible light, said second interference effect being different from said first interference effect.

18. An object according to claim 17, characterised in that a second spot on the object surface is uncoated, in which case its interference effect is the reflecting of visible light from the uncoated surface.

5 19. An object according to claim 17, characterised in that it comprises, on a second spot on the object surface, a film-like optical coating, which creates a given second interference effect at a given wavelength of visible light.

20. An object according to claim 17, characterised in that it comprises at least two coating layers on at least one spot.

21. An object according to claim 17, characterised in that it is a display or part thereof.

15 22. An object according to claim 17, characterised in that it is a mobile telecommunication device or part thereof.

23. An object according to claim 17, characterised in that the coatings are metal compounds, such as MgF_2 .

20 24. An object according to claim 17, characterised in that the coatings are non-metallic compounds, such as SiO_2 .

25 25. An object according to claim 17, characterised in that it comprises coating layers in order to create a hologram.

26. An object according to claim 17, characterised in that it comprises coating areas in order to create alphabetic characters.

30 27. An object according to claim 17, characterised in that it comprises coating areas in order to create graphic symbols.

28. An object according to claim 27, characterised in that in a coating area thereof, the graphic symbols form the symbol of the object's manufacturer.

35 29. An object according to claim 27, characterised in that in a coating area thereof, certain graphic symbols form a part of the trade mark symbol of the object's manufacturer.

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30. An object according to claim 17, **characterised** in that the coating thicknesses are within the range of 0.03 μm -30 μm .

5 31. An object according to claim 17, **characterised** in that it is a product package.

32. An object according to claim 17, **characterised** in that it is a protective shell of a product.

10 33. An object according to claim 17, **characterised** in that it is part of a product.

34. An object according to claim 17, **characterised** in that it is part of another product designed to be used in connection with the first product.

15 35. An object according to claim 17, **characterised** in that it is a guide for instructing how to use the product.

36. An object according to claim 17, **characterised** in that it is a certificate of guarantee of the product.

20 37. An object according to claim 17, **characterised** in that it is a separate certificate indicating the authenticity of the product.

25 38. An object according to claim 17, **characterised** in that the identifier is self-luminous.

39. An object according to claim 38, **characterised** in that in the film-like structure thereof, there is included material that causes phosphorescence in order to achieve self-luminosity.

30 40. An object according to claim 38, **characterised** in that in the film-like structure thereof, there is included material that causes fluorescence in order to achieve self-luminosity.